Safer Maternity Care

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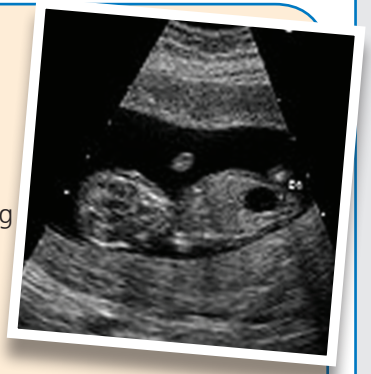
A quarterly e-magazine promoting safety in maternity services

Ultrasound is safe – as far as we know



The independent Advisory Group on Non-Ionising Radiation (AGNIR), which reports to the Health Protection Agency, has reviewed the latest scientific evidence on the health effects of ultrasound.

The report finds that the available evidence does not suggest that diagnostic ultrasound affects mortality of babies during pregnancy or soon after birth. The evidence also does not suggest any effect on childhood cancer risk. There have, however, been some unconfirmed reports suggesting possible effects on the developing nervous system - for instance, on handedness of the child.

AGNIR concluded that there is no established evidence that diagnostic levels of ultrasound are hazardous. However, further research is needed to determine whether there are any long-term adverse health effects, especially following exposure of the unborn child.

Professor Anthony Swerdlow, AGNIR chairman, said:

" Ultrasound has been widely used in medical practice for 50 years, and there is no established evidence of specific hazards from diagnostic exposures. However, in the light of the widespread use of ultrasound in medical practice, its increasing commercial use for 'souvenir' fetal imaging, and the unconfirmed indications of possible neurological effects on the fetus, there is a need for further research on whether there are any long term adverse effects of diagnostic ultrasound. "

In response to this report, the HPA considers that parents-to-be should be aware of uncertainties regarding ultrasound imaging of the fetus and take these into account when deciding whether to have ultrasound scans that do not have a defined diagnostic benefit and provide only keepsake images or "real time" scans.

For the full report, see http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1265028759369

Caution with oxytocin

We love it for what it does but it could betray misplaced trust. Oxytocin is the drug most commonly associated with preventable adverse perinatal outcomes. A paper in the American journal last year advised that "more time rather than more oxytocin is generally preferable" once adequate uterine activity has been achieved. More recently a commentator has revisited some controversies from that paper and recommended increased alertness to the risk of harm from unsafe use of oxytocin.

Rooks JP. Oxytocin as a "high alert medication": a multilayered challenge to the status quo. Birth. 2009 Dec;36(4):345-8.

US CS rate soars

The Caesarean section rate in the USA rose to 32.3 percent in 2008 according to the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS). Preliminary data from the 2008 calendar year showed that the total number of births decreased by 2 percent from 2007, while the CS rate rose for the twelfth year in a row.

Failed induction of labour and Caesarean section for phantom pregnancy

Do you rely on a diagnosis made by others? Better be careful. A woman with pseudocyesis had unsuccessful induction of labour at the Cape Fear Valley Medical Center. The abdomen was then opened under epidural analgesia for a Caesaraen section but no pregnancy was found. Several doctors examined the woman before the attempted CS. The initial diagnosis had been fetal demise in utero, as no fetal heart tones were heard. In January 2010 the North Carolina Medical Board issued public letters of concern to the resident doctor who performed the CS and the supervising doctor on duty. The Board said that their 'inappropriate reliance' on the diagnosis of others and the failure to conduct their own examination were contributing factors in the incident.

Intrapartum toolkit

The National Patient Safety Agency has produced an Intrapartum Toolkit to help maternity units monitor and improve patient safety. The tools in the kit are: The Intrapartum Scorecard; The Placenta Praevia after Caesarean Section Care Bundle; The Review of Intrapartum-related Perinatal Deaths Pro Forma. They can be found at:

http://www.nrls.npsa.nhs.uk/resources/collections/intrapartum-toolkit/

ORACLE children study: Outcomes after use of antibiotics in preterm labour

Findings from a 7-year follow up study of the large randomised controlled trial of use of erythromycin and/ or co-amoxiclav in women presenting in preterm labour (with or without ruptured membranes) have been published in the Lancet. There was a small increase in number of children reported to have functional impairment or cerebral palsy in women presenting in preterm labour with intact membranes. There was no increase in impairment with ruptured membranes.

Pregnant women should not be concerned about taking antibiotics to treat infections. Antibiotics save lives, and pregnant women with possible or obvious infections must be considered for treatment with antibiotics.
THM: women in spontaneous preterm labour with intact membranes and no evidence of infection should not be given antibiotics.

For more information visit
www.mhra.gov.uk

Communicating Risk

Communicating risk to patients is challenging. It is difficult enough translating technical information into lay persons' terms. Emotions, difficulties with numeracy (for both clinicians and patients), and varying values and priorities, influence perception of risk and make communication more difficult.

There is inconsistency in how people infer meanings between numbers and words, and researchers report that people tend to underestimate common risk and overestimate rare risk. Sometimes, risk and probabilities are presented or perceived in ways that distort the key message. Is there a way out of all this? The RCOG has produced a patient information leaflet which addresses the issue. The leaflet is based on the earlier clinical governance advice for clinicians published by the College.

The patient information leaflet *Understanding how risk is discussed in healthcare. Information for you*, published in February 2010, can be found at

http://www.rcog.org.uk/files/rcog-corp/UnderstandingRisk-PI2010.pdf.

The clinical governance advice, *Presenting Information on Risk* can be found at

http://www.rcog.org.uk/files/rcog-corp/uploaded files/CGA7PresentingInformation-Risk22012008.pdf

Toolkit for neonatal services

It clarifies the responsibilities of those delivering and commissioning neonatal services. It includes resources to assist commissioners and providers in defining and measuring the quality of the service they offer. Good practice guidance is provided in relation to the organisation of neonatal services; staffing; care of the baby and the family experience; transfers; professional competence, education and training; surgical services; clinical governance; and data requirement. To access the toolkit,

visit http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107845

New Guidance on Classification of CS

The Royal College of Obstetricians and Gynaecologists and the Royal College of Anaesthetists have jointly published a new clinical practice guidance on classification of urgency of caesarean section. The guidance recommends a modified version of the Lucas classification. A colour scale is added, emphasising the need to recognise that a 'continuum of urgency' applies to caesarean section, rather than discrete categories. Compliance with the guidance should help ensure that all members of the team have a common understanding of the degree of urgency of the procedure for that specific case. The guidance recommends that units should consider introducing a formal drill for 'emergency caesarean section' in their in-house teaching programmes.

In a sense, it is unfortunate that the guidance used this term. To encourage universal adoption of the new classification, the traditional terms elective/emergency CS should be abandoned completely. Also, skills drills are helpful for emergencies that do not occur often. For most obstetric units in the UK, category 1 caesareans happen frequently enough to make any further drill of limited value. It would perhaps be more rewarding to review real-life cases and identify any tasks or others factors that prolong the decision-delivery interval.

http://www.rcog.org.uk/files/rcog-corp/GoodPractice-11ClassificationofUrgency.pdf

Death from instrumental delivery

...As a result of failed multiple instrumentation

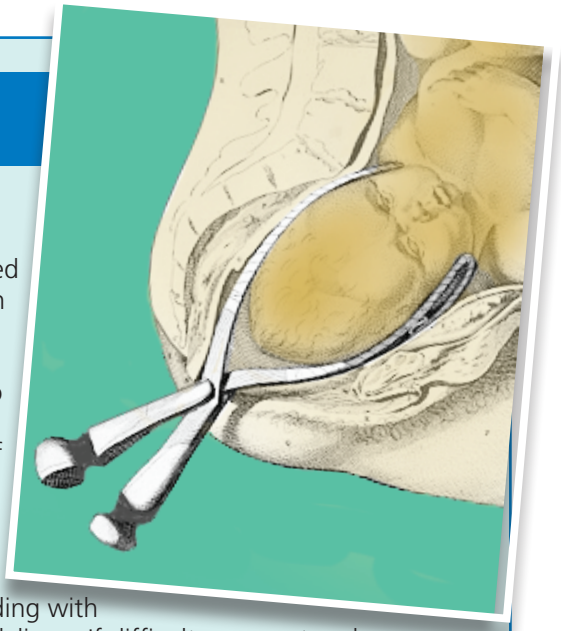
An inquest at Dublin City Coroner's Court heard how failed attempts at delivery using vacuum and forceps left a baby boy with severe head injuries which led to his death the following day. Baby Parker Meredith-Doyle died at the National Maternity Hospital in Dublin. The registrar used ventouse, forceps and another type of vacuum device, all unsuccessfully. The baby was delivered by emergency CS when the midwife called the consultant. His mother had a previous failed forceps delivery, 13 years earlier. Coroner Dr Brian Farrell recorded a verdict of death by medical misadventure.

- Culled from the Irish Independent, 21 November 2009

...Due to unrecognised malposition

A BABY twin died minutes after being born at Sheffield's Jessop maternity unit from severe head injuries caused by forceps used to deliver him, an inquest heard. The 34-week baby had a depressed skull fracture, torn brain tissue, and bleeding to the brain. Marks on the baby's head found during a post mortem examination showed forceps had not been applied correctly because the doctor misjudged the baby's position, the inquest was told. The doctor believed position was occipito-anterior but the baby's head was actually to the side and slightly askew (occipito-transverse and asynclitic). The second twin was delivered in good health. Coroner Christopher Dorries criticised the doctor for the "omission of facts" in the contemporaneous record and in a report prepared for him.

- Culled from The Star (South Yorkshire), 29 July 2009



THMs:

- Whilst forceps may 'have saved more lives than any other instrument', they could also cause death or serious injury if not used appropriately
- Be certain of baby's position before proceeding with instrumental delivery. If difficulty encountered, recheck position.
- Stick to the limitations prescribed by local protocol regarding number of pulls without descent.
- Exercise extreme caution with dual instrumentation. You must have robust justification before applying a second instrument.
- Call the consultant or other colleague if difficulty encountered
- The midwife should not hesitate to call the consultant if the junior doctor is hesitant in doing so.
- Be open when things go wrong.

For a taxonomy of errors in instrumental delivery and how to avoid them, see Edozien LC, Towards safe practice in instrumental vaginal delivery. Best Pract Res Clin Obstet Gynaecol 2007; 21: 639-55.

Do specialty registrars change their attitudes, intentions and behaviour towards reporting incidents following a patient safety course?

This question was addressed in a study which examined the effect of a two-day patient safety course on the attitudes, intentions and behaviour concerning the voluntary reporting of incidents by specialty registrars. A patient safety course was designed to increase specialty registrars' knowledge, attitudes and skills in order to recognize and cope with unintended events and unsafe situations at an early stage. Data were collected before, immediately after and six months after the course. The response rate at all three points in time assessed was 100% (n=33). There were significant changes in incident reporting attitudes and intentions immediately after the course, as well as during follow-up. However, no significant changes were found in incident reporting behaviour. The authors concluded that 'patient safety education can have long-term positive effects on attitudes towards reporting incidents and the intentions of registrars [but] further efforts need to be undertaken to induce a real change in behaviour'.

Vaginal birth after three caesareans?

A study in the BJOG (see reference below) reports that that women with three or more prior caesareans who attempt vaginal birth have similar rates of success and risk for maternal morbidity as those with one prior caesarean, In this study, the 89 women with three or more prior caesareans who attempted vaginal birth were as likely to be successful as women with one or two prior caesareans, 79.8% compared to 75.5% and 74.6% respectively. None of the women experienced significant maternal morbidity such as uterine rupture and bladder injury. The current RCOG guidance for birth after CS states that 'planned VBAC is contraindicated in women with… three or more previous caesarean deliveries (reliable estimate of risks of rupture unknown)'. Perhaps further research is required before we all jump on the bandwagon. Readers' views welcome – send your concise comments to the editor at the email address provided at the end of this e-magazine.

Cahill A. Tuuli M, Odibo A, Stamilio D, Macones G. Vaginal birth after caesarean for women with three or more prior caesareans: assessing safety and success. BJOG 2010; DOI: 10.1111/j.1471-0528.2010.02498.x.

Improving the care of women with obesity

In 2007, the CEMACH report Saving Mothers Lives identified maternal obesity as a major risk. A survey of NHS maternity units conducted by the Centre for Maternal and Child Enquiries (CMACE) in 2008 showed the following figures (percentage of units providing the respective services to women with obesity):

• preconception care and advice 6% • provision of printed information for women specifically focused on the issue of obesity and pregnancy 18% • specific advice on dieting 33% • antenatal anaesthetic assessment 50% • have no local guidelines for the care and management of women with obesity 44%.

For the joint CMACE/RCOG guidance on management of obesity in pregnancy, published March 2010, see

http://www.rcog.org.uk/files/rcog-corp/CMACERCOGJointGuidelineManagementWomenObesityPregnancya.pdf

Higher stillbirth rates with independent midwives? Response from Independent Midwives

Independent Midwives UK read with concern the item in the first edition of this e-magazine which referred to a recent study and which we thought implied a higher overall PNMR with independent midwives (IMs) than in the NHS. We knew that if an additional sentence from the study had also been included, it would have changed that impression:

'Exclusion of "high risk" cases from both cohorts showed a non-significant difference (0.5% (5) v 0.3%(18); 2.73, 0.87 to 8.55); the "low risk" IMA perinatal mortality rate is comparable with other studies of low risk births'

We also want to highlight the excellent editorial in the same issue of the BMJ which spells out the limitations of the study in question, especially around mortality rates:

Unfortunately, the matching process was largely unsuccessful …and substantial data gaps….leaves discussion about perinatal death hazardously speculative'.

In any discussion about safety in the maternity services, great care is needed when editing information which relates to outcomes, to ensure it gives as accurate a summary as possible. IM UK are pleased to have the opportunity to share this additional information but would recommend reading both the study and the editorial in full for a more complete understanding of the issues involved.

Symon *et al*, BMJ 2009;338:b2060
Shorten and Shorten, BMJ 2009;338:b2210

Review of maternity services in Northern Ireland

Plans have been announced for a comprehensive review of maternity services in Northern Ireland. Announcing the review the Health Minister, Michael McGimpsey**,** said:

"Safe sustainable maternity services are a top priority for my Department. Over recent years our maternity services have been under considerable pressure and I want to acknowledge the hard work and commitment of all staff involved in maternity care. In Northern Ireland we have one of the safest maternity services in the UK. However, the increasing birth rate and ever increasing standards for maternity services, means the time is right for us to take a comprehensive look at our service."

The review will be co-chaired by Dr Paul Fogarty, consultant obstetrician/gynaecologist, and Professor Cathy Warwick, General Secretary of the Royal College of Midwives.

Safer Maternity Care (SMC) is published four times a year by the Endowment for Training and Education in Reproduction (ENTER).

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From the editorial suite

A big thank you to all who have given encouraging feedback on the safe delivery of the maiden issue of SMC. Thanks also to those who have been so helpful in disseminating this e- magazine to all stakeholders.
For those who missed the first issue, it can be found on our website, www.womenshealthcare.co.uk (click on the SMC link).

We aim to raise awareness of safety issues in maternity services, but also want to share knowledge of investment activities. In what ways have you, individually or as a unit, invested in patient safety? Here, we are not talking about financial investment but about things that have been implemented to protect and enhance safety. Let us know, so we can share it with others through this medium.
We hope you find this issue informative – again, let us know how we can get better.

Safety improvement tip

At St Mary's Hospital, Manchester, we use traffic lights (green, yellow and red spot stickers) to prospectively and periodically classify CTG traces as normal, suspicious or pathological.

Send your safety improvement tips to the editor.